



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/851,369	05/08/2001	Julie F. Lyman	7784-000185	2389
27572	7590	10/05/2005	EXAMINER	
HARNESS, DICKEY & PIERCE, P.L.C. P.O. BOX 828 BLOOMFIELD HILLS, MI 48303			TRAN, HAI V	
			ART UNIT	PAPER NUMBER
			2611	

DATE MAILED: 10/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/851,369

Applicant(s)

LYMAN, JULIE F.

Examiner

Hai Tran

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09/26/2005
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1, 12, 13, 15 and 18 are rejected under 35 U.S.C. 102(e) as being unpatentable by Wiedeman et al. (US 6661996).

Claim 1, Wiedeman discloses a method for providing data content to a plurality of platforms traveling in a plurality of satellite coverage regions, each platform including a mobile communications system configured for bi-directional communication with a ground segment via satellite link (Fig. 2A-C; Fig. 4-5), said method comprising the steps of:

within each of the coverage regions, multicasting data content selected for the region to platforms via an associated ground station and satellite (Col. 8, lines 65-Col. 9, line 33); and

as a platform leaves one of the coverage regions and enters another of the coverage regions, configuring the mobile communications system on the entering platform to receive the multicast in the coverage region being entered, said step

Art Unit: 2611

being performed via the ground station associated with the coverage region being left (Col. 10, lines 53-Col. 11, lines 20).

Claim 12 is analyzed with respect to claim 1.

Claim 13 is analyzed with respect to claim 1.

Claim 15 is analyzed with respect to claim 1

Claim 18 is analyzed with respect to claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nelson et al. (US 6760778) in view of Wiedeman et al. (US 6661996).

Claim 1, Nelson discloses a method for of providing data content to a plurality of platforms traveling in a plurality of satellite coverage regions, each platform including a mobile communications system configured for bi-directional communication with a ground segment via satellite link (Fig. 1), said method comprising the steps of:

within each of the coverage regions, multicasting data content selected for the region (Fig. 6) to platforms via an associated ground station and satellite (Col. 9, lines 38-Col. 10, lines 10; Col. 12, lines 8-30); and

as a platform leaves one of the coverage regions and enters another of the coverage regions, configuring the mobile communications system on the entering platform to receive the multicast in the coverage region being entered, said step being performed via the ground station associated with the coverage region being left (Col. 11, lines 42-Col. 12, lines 7). Nelson further discloses that the present system able to configure of using satellite (Col. 14, lines 7-10).

Nelson does not clearly disclose providing data content to a plurality of platforms traveling in a plurality of satellite coverage regions configured for bi-directional communication with a ground segment via satellite link.

Wiedeman, an analogous art, discloses a system of providing data content to a plurality of platforms traveling in a plurality of satellite coverage regions configured for bi-directional communication with a ground segment via satellite link (Fig. 2A-C; Fig. 4-5; Fig. 6; Col. 9, lines 38-Col. 10, lines 10; Col. 12, lines 8-30 and Col. 11, lines 42-Col. 12, lines 7). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Nelson of having a plurality of platforms traveling in a plurality of satellite coverage regions configured for bi-directional communication with a ground segment via satellite link, as taught by Wiedeman so to provide a larger effective terrestrial coverage area of communication.

Claim 2, Nelson (Col. 12, lines 10-55) in view of Wiedeman further discloses the step of customizing data content for a regional multicast to relate to at least one of a platform provider, a geographic location and a platform destination.

Claim 3, Nelson (Col. 12, lines 21-23) in view of Wiedeman further discloses wherein said step of multicasting data content comprises the step of multicasting video content.

Claim 4, Nelson (Col. 8, lines 34-36) in view of Wiedeman further discloses wherein said step of multicasting data content is performed within the plurality of coverage regions using a scheduling function.

Claim 5, Nelson (Col. 11, lines 44-54) in view of Wiedeman further discloses the step of configuring the mobile communications system to drop data content directed to platforms other than those provided by the provider of the entering platform.

Claim 6, Nelson (Col. 11, lines 44-54) in view of Wiedeman further discloses the step of configuring the mobile communications system to accept at least a portion of the multicast data content for delivery to a user on the entering platform.

Claim 7, Nelson (Col. 11, lines 54-Col. 12, lines 8) in view of Wiedeman further discloses wherein said step of configuring the mobile communications system

Art Unit: 2611

on the entering platform comprises the step of transmitting changes to a forwarding table of the mobile communications system.

Claim 8, Nelson in view of Wiedeman (Col. 6, lines 47-Col. 7, lines 5) further discloses wherein said step of transmitting changes to a forwarding table is performed at satellite hand-off.

Claim 9, Nelson (Col. 12, lines 24-40) in view of Wiedeman further discloses the step of varying the data content multicasts according to coverage region.

Claim 10. Nelson (Col. 8, lines 35-37) in view of Wiedeman further discloses wherein said step of multicasting data content comprises the step of refreshing at least a portion of data content previously received by a platform (does not need a air ground link, data is retrieved from the pre-loaded storage) while in another coverage region.

Claim 11, Nelson (Col. 8, lines 35-37) in view of Wiedeman further discloses the step of allowing at least a portion of data content previously received by a platform while in another coverage region to expire.

Claim 12 is analyzed with respect to claim 1.

Claim 13 is analyzed with respect to claims 1 and 5.

Claim 14 is analyzed with respect to claim 7.

Claim 15 is analyzed with respect to claim 1.

Claim 16 is analyzed with respect to claim 9.

Claim 17, Nelson (Col. 12, lines 21-23) in view of Wiedeman further discloses wherein for each of the coverage regions, the associated ground station and satellite are configured to multicast video data to users on a platform in the coverage region .

Claim 18 is analyzed with respect to claim 1.

Claim 19 is analyzed with respect to claim 4.

Claim 20 is analyzed with respect to claim 7.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Tran whose telephone number is (571) 272-7305. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher C. Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2611

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT:ht
09/29/2005


HAITRAN
PRIMARY EXAMINER